FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

MSDS #: 25.00

Revision Date: November 25, 2002

Section 1 — Chemical Product and Company Identification

Aitch-Tu-Ess Cartridges

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Section 2 — Composition, Information on Ingredients

Mixture of sulfur, granular asphalt, sand and a blue dye.

CAS#: None Established

Section 3 — Hazards Identification

Slightly green-looking granules. Odorless. Aitch-tu-ess cartridges produce hydrogen sulfide (H2S) gas upon heating. Hydrogen sulfide is highly flammable, highly toxic by inhalation and strong irritant to eyes and mucous membranes.

FLINN AT-A-GLANCE

Health-3 Flammability-3 Reactivity-1 Exposure-1 Storage-3

0 is low hazard, 3 is high hazard

Section 4 — First Aid Measures

Call a physician, seek medical attention for further treatment, observation and support after first aid. Inhalation: Remove to fresh air at once. If breathing has stopped give artificial respiration immediately.

Eye: Immediately flush with fresh water for 15 minutes.

External: Wash continuously with fresh water for 15 minutes.

Internal: Give large quantities of water. Call a physician or poison control at once.

Section 5 — Fire Fighting Measures

As H2S gas, highly flammable. Severe fire risk.

Fire Fighting Instructions: Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

NFPA CODE

None Established

Section 6 — Accidental Release Measures

If tube is broken, treat tube contents with utmost care because of the potential to produce H2S upon heating. Restrict unprotected personnel from area. Remove all ignition sources and ventilate area. Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

Section 7 — Handling and Storage

Flinn Suggested Chemical Storage Pattern: Inorganic #5. Store with sulfides, phosphides, carbides and nitrides. Store in a poison's cabinet or locked cabinet.

<u>Section 8 — Exposure Controls , Personal Protection</u>

Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, chemical-resistant gloves and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire). Exposure guideline for H2S: TWA 10 ppm (ACGIH).

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Section 9 — Physical and Chemical Properties

Mixture of asphalt, sulfur and other ingredients contained in a tube which, when heated, will generate hydrogen sulfide (H2S) gas.

Section 10 — Stability and Reactivity

Avoid heating these tubes except under controlled laboratory conditions. Shelf Life: Indefinite.

<u>Section 11 — Toxicological Information</u>

Acute effects: Strong irritant to eyes and mucous membranes
Chronic effects: N.A.

Target organs: N.A.

CRL-RAT LD50: N.A.

IHL-RAT LC50: N.A.

SKN-RBT LD50: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

Section 12 — Ecological Information

Data not yet available.

Section 13 — Disposal Considerations

Please consult with state and local regulations. Flinn Suggested Disposal Method 18b is one option.

Section 14 — Transport Information

Shipping Name: Not regulated

Hazard Class: N/A UN Number: N/A N/A = Not applicable

Section 15 — Regulatory Information

Not listed.

Section 16 — Other Information

Consult your copy of the Flinn Scientific Catalog/Reference Manual for additional information about laboratory chemicals. This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. Flinn Scientific Inc. assumes no legal responsibility for use or reliance upon this data.

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